

Notice of Allowability

Application No.

10/820,125

Examiner

TAN TRINH

Applicant(s)

QIU ET AL.

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4-8-2004.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 08-05-2004, the information disclosure statement has been considered by the examiner.

Allowable Subject Matter

3. Claims 1-10 are allowed.

Reasons for allowance

4. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 1, 6 and 8 the reference of Suwa teaches preamble transmission power control is performed on the basis of the priority level and information volume of the broadcast information and the transmitted information symbol sequence, and the number of carriers (see fig. 6 and page 4, section [0042]) and the mobile station 20 in FIG. 1 performs random access by transmitting a preamble to the base station 10. In FIG. 3, an aspect is shown in which the mobile station 20 repeatedly transmits a preamble to the base station 10 via N_c carriers by means of the transmission control means 23 and the power control means 24, and varies the preamble transmission power until the mobile station 20 receives a preamble receipt confirmation signal from the base station 10 with the prescribed maximum number of preamble transmissions serving as an upper limit number, before transmitting a packet

Art Unit: 2618

that includes an information symbol sequence (see fig. 3, page 4, section [0061]). However, Suwa alone or in combination with other prior art of record, fail to disclose; a base station configured to perform radio communication based on code division multiplexing with a mobile station which transmits a preamble prior to a start of transmission/reception of data, and to transmit a pilot signal at a predetermined transmission power to the mobile station, the base station comprising: preamble receiving means for receiving the preamble spread with a spreading code from the mobile station; correspondence storing means storing any one of correspondence information between the spreading code used for the preamble and, the reception power or the signal interference ratio of the pilot signal at the mobile station, correspondence information between the spreading code and the preamble transmission power of the mobile station, and correspondence information between the spreading code and the combination of the reception power or the signal interference ratio of the pilot signal at the mobile station with the preamble transmission power of the mobile station; and determining means for determining at least one of a transmission power and a downlink transmission rate for a signal directed to the mobile station, and an uplink transmission rate for transmission of information from the mobile station, based on at least the spreading code, as specified in independent claims, 1, 6 and 8 .

Regarding independent claims 5 and 10, the reference of Suwa teaches preamble transmission power control is performed on the basis of the priority level and information volume of the broadcast information and the transmitted information symbol sequence, and the number of carriers (see fig. 6 and page 4, section [0042]) and the mobile station 20 in

Art Unit: 2618

FIG. 1 performs random access by transmitting a preamble to the base station 10. In FIG. 3, an aspect is shown in which the mobile station 20 repeatedly transmits a preamble to the base station 10 via N_c carriers by means of the transmission control means 23 and the power control means 24, and varies the preamble transmission power until the mobile station 20 receives a preamble receipt confirmation signal from the base station 10 with the prescribed maximum number of preamble transmissions serving as an upper limit number, before transmitting a packet that includes an information symbol sequence (see fig. 3, page 4, section [0061]). However, Suwa alone or in combination with other prior art of record, fail to disclose; A mobile station configured to perform radio communication based on code division multiplexing with a base station which transmits a pilot signal at a predetermined transmission power, and to transmit a preamble to the base station prior to a start of transmission/reception of data, the mobile station comprising: correspondence storing means storing any one of correspondence information between the spreading code used for the preamble and, the reception power or the signal interference ratio of the pilot signal at the mobile station, correspondence information between the spreading code and the preamble transmission power of the mobile station, and correspondence information between the spreading code and the combination of the reception power or the signal interference ratio of the pilot signal at the mobile station with the preamble transmission power of the mobile station; and spreading means for spreading the preamble with the spreading code corresponding to any one of the reception power or the signal interference ratio about the pilot signal at the mobile station, the preamble transmission power of the mobile station; and the combination of the reception power or the signal interference ratio of the pilot

Art Unit: 2618

signal at the mobile station with the preamble transmission power of the mobile station, based on said correspondence, as specified in independent claims, 5 and 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

Art Unit: 2618

The fax phone number for the organization where this application or proceeding is assigned is **(571) 273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh 
Division 2618
Jan 28, 2007

Anderson, Matthew D. (SPE 2618)
